



Medición de la economía y comercio digital en Latinoamérica y el Caribe 8 al 11 de noviembre de 2022

Sesión 7

El uso de datos de plataformas para las estadísticas de turismo

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Did you know that...

- In 2019, visitors from South and Central America spent 11.7 million nights in short term rental in the EU?
- Their most popular destinations were Spain, Italy and Portugal.



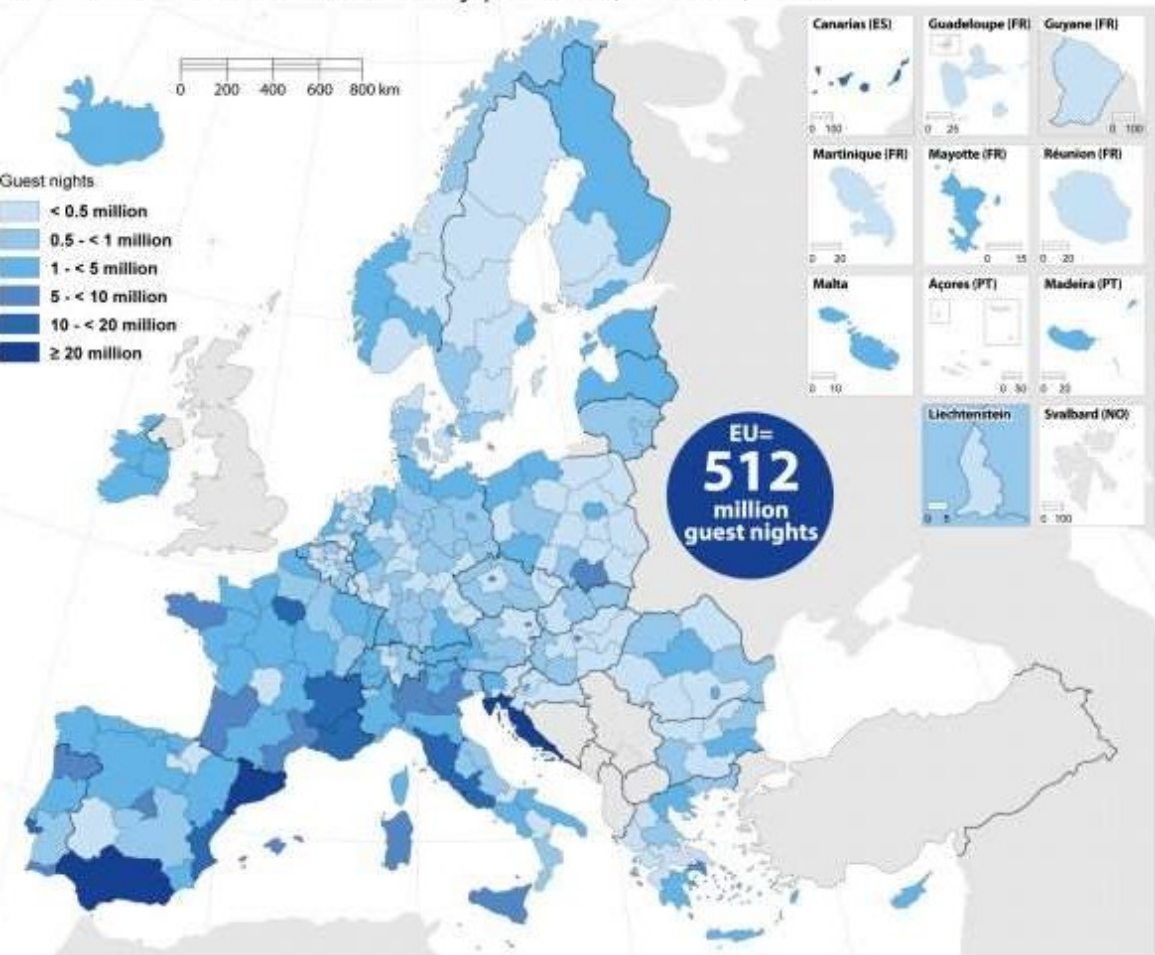


Did you know that...

- In the first half of 2022, around 200 million guest nights were spent in apartments booked at Airbnb, Booking, Expedia or Tripadvisor?
- This means around 19 million bookings, or around 70 per minute.

Guest nights spent at short-stay accommodation

Booked via collaborative economy platforms, NUTS 2, 2019



Data sharing agreement with Airbnb, Booking, Expedia Group and TripAdvisor

Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat - IMAGE, 12/2021

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Well, we know!

Questions I will answer in the next 15'



What?

Which data are available?



Why?

What is the motivation?



How?

Agreements with the platforms



Where?

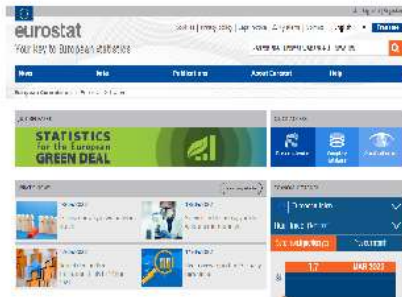
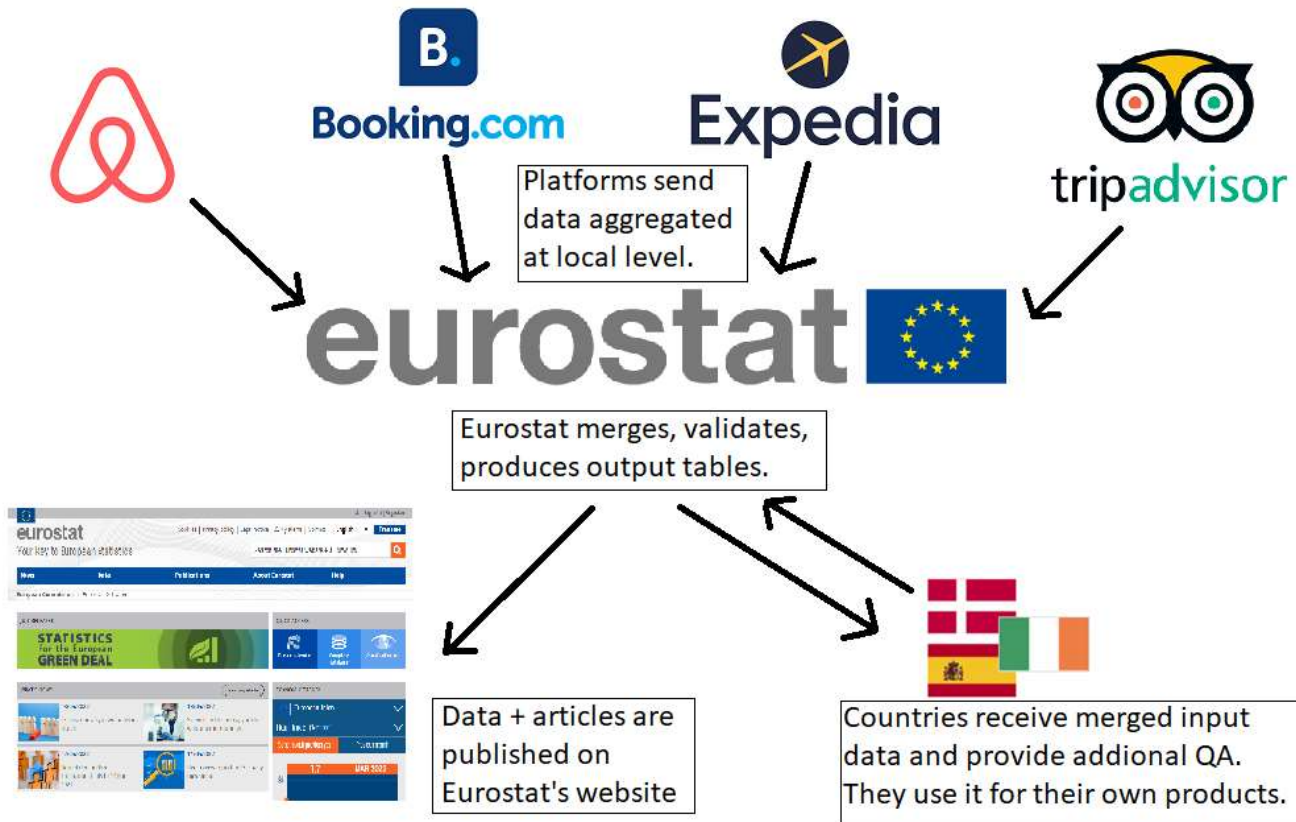
How can you access the data?



What's next?

Release calendar and next steps

What? : Brief overview



What? : type of available data



- **The platforms share data on capacity and on occupancy**
 - ⇒ Number of **stays**, number of **nights spent**, number of **guest nights** (by year and month)
 - ⇒ (Number of hosts, number of listings, number of bed places - not yet published!)
 - ⇒ Geographical breakdowns, including data at **cities** level (around 250 cities)
 - ⇒ Shared vs. entire facility ; fewer than 10 beds vs. 10 beds or more
 - ⇒ *Not available*: data on turnover or data on prices
- **Output similar to the ‘traditional’ tourism statistics released by Eurostat**
 - ⇒ Additional geographical breakdowns of national interest published by NSIs
- **Coverage: holiday and short-stay accommodation**
 - ⇒ Apartments, rooms, houses, villas, etc...

~~NACE 55.1 :~~
~~Hotels and similar~~
~~accommodation~~

NACE 55.2 :
Holiday and short-stay
accommodation

~~NACE 55.3 :~~
~~Camping grounds,~~
~~trailer parks, etc.~~

Why? : “raison d’être” of the project



- **Data needs in tourism statistics**
 - ⇒ Better coverage of short-stay accommodation
 - ⇒ Small establishments (less 10 bed places) not well covered by tourism surveys or registers (but now: digital footprint via platforms!)
 - ⇒ Policy makers need information on this ‘new’ segment of the tourist accommodation sector
- **Explore sharing of privately held data for statistical purposes**
 - ⇒ Expensive or infeasible to collect data from many households/small enterprises
 - ⇒ Most information available with relatively few platforms
- **Part of a wider Eurostat initiative on measuring the collaborative economy**

Success and failure in exploring privately held data



■ Platforms project [2015 – 2017] – first attempt(s)

- ⇒ Web-scraping, using existing results from eg. InsideAirbnb (late 2015) ⇔ impartiality?
- ⇒ First contacts with Airbnb (early 2016) ⇒ failed
 - We didn't talk to all the right people (only statisticians and Airbnb data scientists)
 - We were too greedy (“the ethnocentric approach of the spoilt official statistician”)

■ Platforms project [2018 – ...] – second attempt

- ⇒ Multi-disciplinary group (data scientists, contracts dept., investor relations dept., public policy, lawyers) → eg. on “our” side: GROW + ESTAT production unit + ESTAT legal affairs
- ⇒ Level playing field for the sector, also vis-à-vis the traditional accommodation sector → eg. not 1 but 4 platforms involved; requirements similar to those in Regulation 692/2011
- ⇒ Balanced, negotiated demands (incl. NDAs as backbone of the cooperation)

How? : Structure of the agreement



- Airbnb, Booking, Expedia and Tripadvisor send occupancy and capacity data aggregated at local level to Eurostat each quarter (and submit metadata)
- Eurostat merges and validates the data and produces:
 - Output data for various geographical aggregates (EU, Member States, regions, cities)
 - Merged “raw” files for NSIs for additional validation at national level and national data releases/articles/etc.
- NSIs and Eurostat disseminate the data and produce various articles, news releases, etc. based on it.

ESS governance of the project : our little revolution



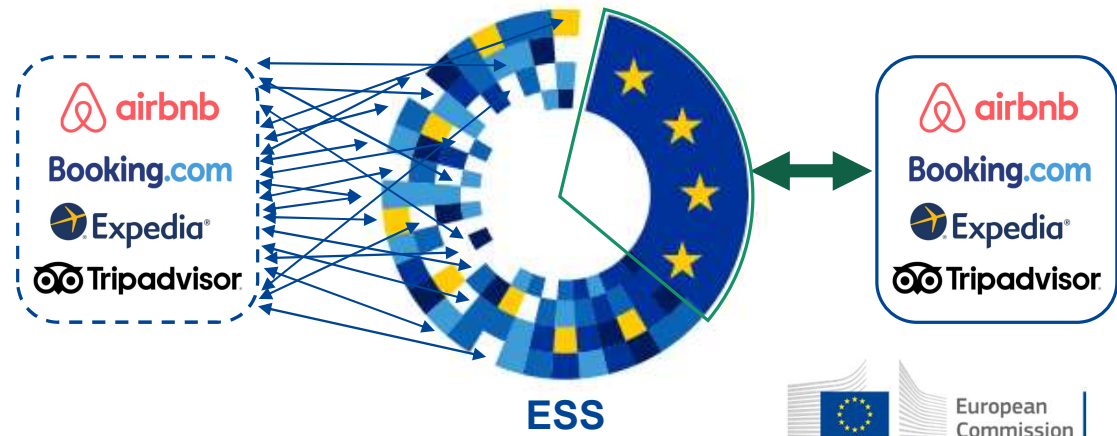
- A practical example of applying the **subsidiarity** principle

- ⇒ 1950es until now: **decentralised approach**

- Eurostat coordinates harmonisation of statistics in the EU, but fieldwork – including key methodological choices – usually happens decentralised in the Member States. This approach makes maximum use of the skills in the NSIs and of the NSI's proximity to eg. national registers or “survey culture” in the country

- ⇒ Platforms project: **centralised approach**

- General consensus by all stakeholders (Eurostat, NSIs, platforms) that the optimal approach is a “single entry”, **coordinated effort by Eurostat**, in close cooperation with the NSIs and backed by a mandate of the NSIs as discussed at technical level (WG) and strategic level (ESSC, DGINS workshop in May 2019).



Where? - How to access our content



The screenshot shows the Eurostat website interface. At the top, there's a search bar and navigation links. Below, there are tabs for 'News', 'Data', 'Publications', 'About Eurostat', and 'Help'. The main content area features a section titled 'COLLABORATIVE ECONOMY PLATFORMS' with a sub-section 'Why do we need statistics on short-stay accommodation offered via online collaborative economy platforms?'. A 'Send us a message' button is visible on the right side of the content area.

On our website

[Link](#)

Monthly number of nights spent at short-stay accommodation offered via collaborative economy platforms, by region (NUTS1, NU)

Country region	2019			January	
	Total	Domestic	International	Total	Domestic
EU-27	196,076,000	64,042,000	126,034,000	7,721,000	2,705,000
BE	2,646,000	489,000	2,157,000	124,000	23,000
BE1	1,052,000	73,000	979,000	61,000	6,000
BE10	1,052,000	73,000	979,000	61,000	6,000
BE2	1,115,000	200,000	915,000	44,000	10,000
BE21	281,000	37,000	244,000	15,000	3,000
BE22	52,000	16,000	36,000	2,000	<1,000
BE23	189,000	24,000	165,000	9,000	1,000
BE24	113,000	19,000	94,000	6,000	<1,000
BE25	481,000	164,000	317,000	13,000	4,000
BE3	478,000	156,000	322,000	20,000	7,000
BE31	42,000	9,000	33,000	2,000	<1,000
BE32	72,000	16,000	56,000	4,000	<1,000
BE33	174,000	49,000	125,000	7,000	2,000
BE34	107,000	51,000	56,000	4,000	2,000
BE35	83,000	31,000	51,000	3,000	1,000
BG	1,364,000	383,000	980,000	60,000	14,000
BG3	752,000	216,000	535,000	4,000	2,000

Via our database

[Link](#)

The screenshot shows the 'Statistics Explained' article page. It features the Eurostat logo and a title 'Statistics Explained'. Below the title, there's a sub-section 'WELCOME TO STATISTICS EXPLAINED'. The main text describes the purpose of the site: 'Statistics Explained, your guide to European statistics. Statistics Explained is an official Eurostat website presenting statistical topics in an easily understandable way. Together, the articles make up an encyclopedia of European statistics for everyone, completed by a statistical glossary clarifying all terms used and by numerous links to further information and the latest data and metadata, a portal for occasional and regular users.'

As a Wiki article

[Link](#)

<https://ec.europa.eu/eurostat/web/experimental-statistics/collaborative-economy-platforms>

Where? – ES publication

INE
Instituto Nacional de Estadística

English

Escribe el texto para buscar

Censo Electoral Sede electrónica Compartir

Métodos y proyectos / Nuevo... / Estadí... / Estadística experimental. Estimación de la ocupación en alojamientos turísticos a partir de datos de plataformas digitales

Estadística experimental. Estimación de la ocupación en alojamientos turísticos a partir de datos de plataformas digitales

El principal objetivo de esta estadística experimental es complementar la información de las encuestas tradicionales de ocupación en el ámbito del grupo *Alojamientos turísticos y otros alojamientos de corta estancia* que es el que tiene una mayor presencia en las plataformas digitales y en la que el fenómeno de la economía colaborativa (origen de estas plataformas) tiene un mayor impacto.

Se incluyen en el ámbito de esta estadística un amplio abanico de tipologías alojativas que va desde los apartamentos turísticos, albergues turísticos, casas rurales, así como las viviendas de uso turístico

Nota de prensa Proyecto técnico Tablas de resultados

Pernoctaciones en alojamientos turísticos y otros alojamientos de corta estancia (Anual)

Selecciona el ámbito geográfico: Comunidades y Ciudades Autónomas Provincias

RESIDENCIA/ORIGEN: Total
Periodo: 2021

Ver Total Nacional



Total Nacional (68.272.000 Pernoctaciones)

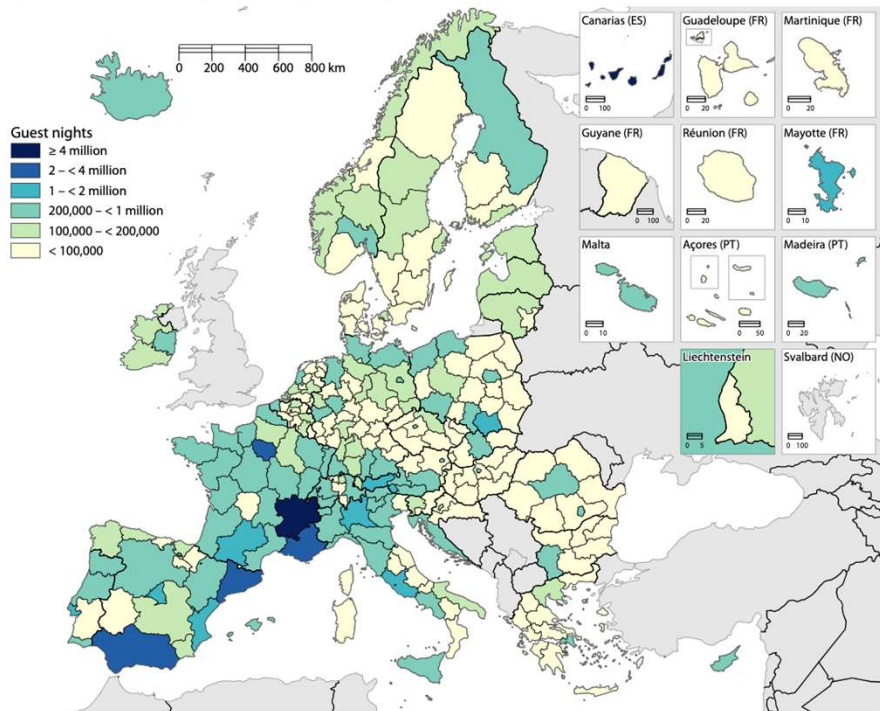


Year	Total National Pernoctaciones
2020	~80,000,000
2021	~105,000,000

https://www.ine.es/experimental/ocupacion/experimental_ocupacion.htm?L=0

Data teaser: First half of 2022

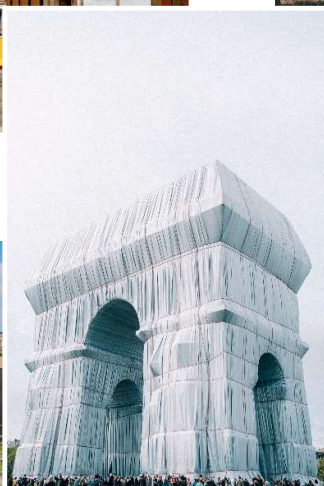
Guest nights spent at short-stay accommodation
Booked via online platforms, NUTS2, Jan-Mar 2022



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- 199 million guest nights so far
- +138 % compared to 2021
- Feb-June levels exceed 2019
- High seasonality – Alpine regions popular alongside the Mediterranean
- High variability across Europe

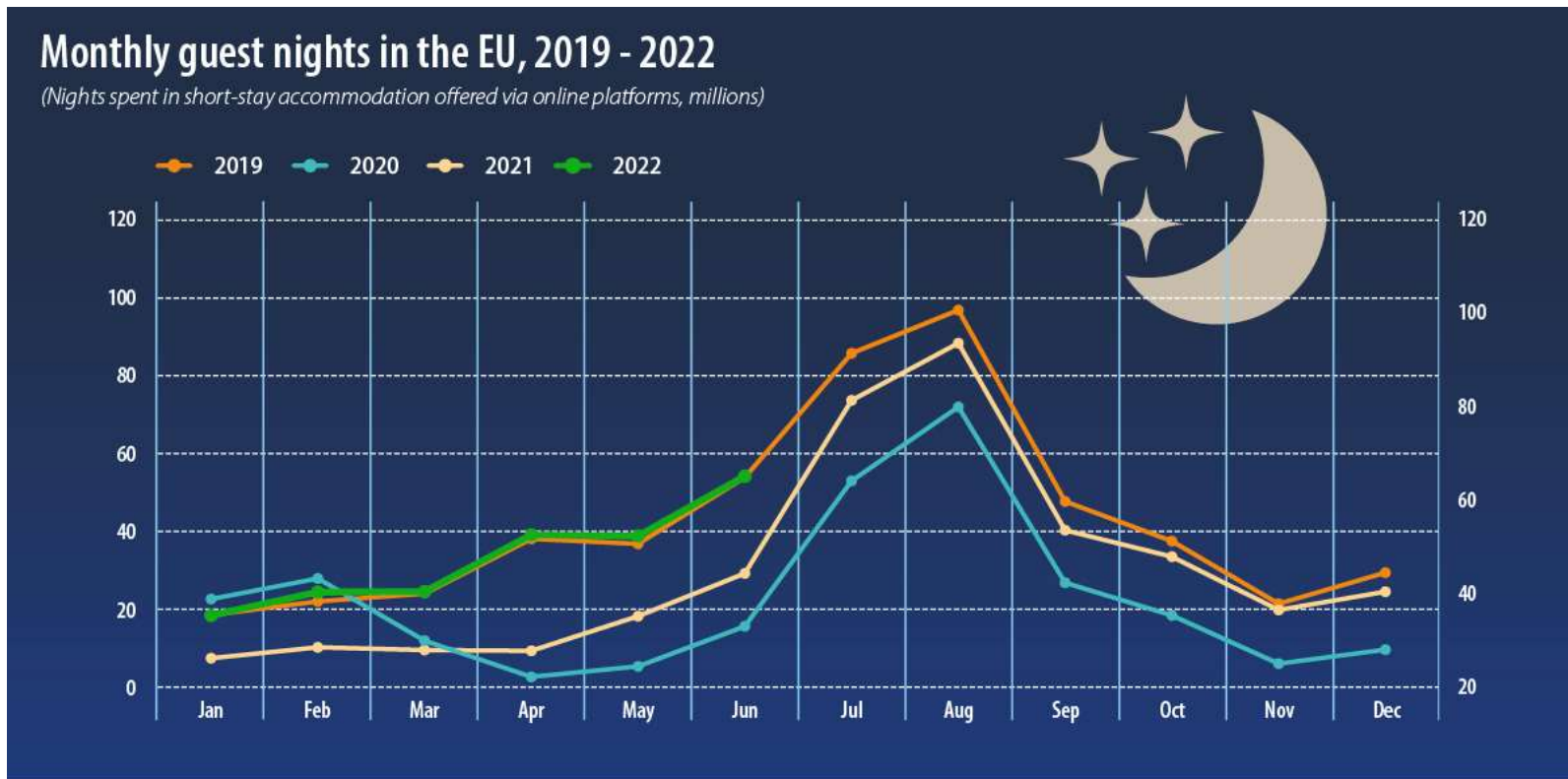
Top cities



Cities with the highest number of guest nights booked via collaborative economy platforms (2019)

City	Number of guest nights
Paris (greater city)	13 523 000
Barcelona (greater city)	11 028 000
Lisboa (greater city)	10 235 000
Roma	10 131 000
Madrid (greater city)	7 904 000
Budapest	6 819 000
Praha	6 512 000
Porto (greater city)	5 171 000
Wien	5 057 000
Nice	4 914 000
Athina (greater city)	4 554 000
Milano (greater city)	4 438 000
Berlin	4 221 000
Valencia (greater city)	4 078 000
Firenze	4 032 000
Sevilla (greater city)	3 949 000
Kraków	3 564 000
Venezia	3 517 000
Málaga	3 344 000
Warszawa	2 910 000
Dublin (greater city)	2 620 000
Napoli (greater city)	2 251 000
Split	2 230 000
Amsterdam (greater city)	2 224 000
København (greater city)	2 174 000
Bruxelles / Brussel (greater city)	2 110 000
Granada (greater city)	2 036 000
Gdansk	1 891 000
Marseille	1 741 000
Valletta (greater city)	1 730 000

Impact of the pandemic (1)

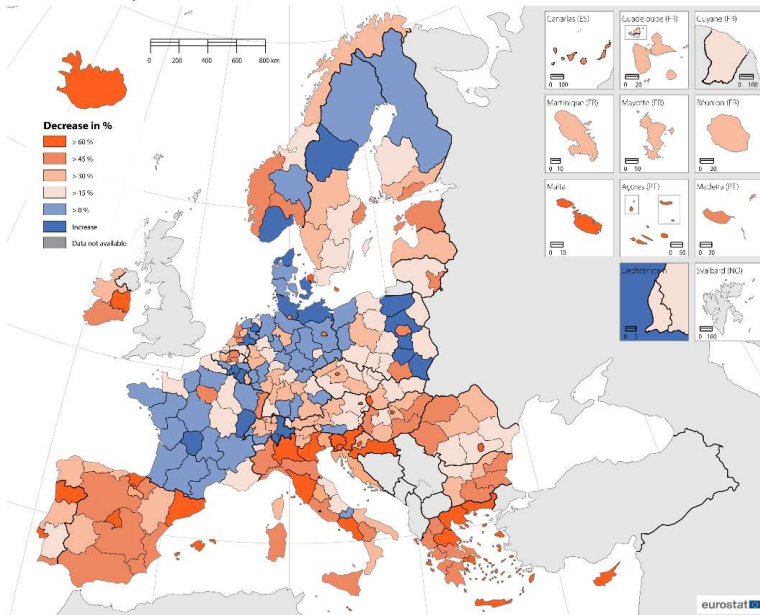


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Impact of the pandemic (2)

Guest nights spent at short-stay accommodation

Booked via online platforms, NUTS2, decrease between 2019 and 2020

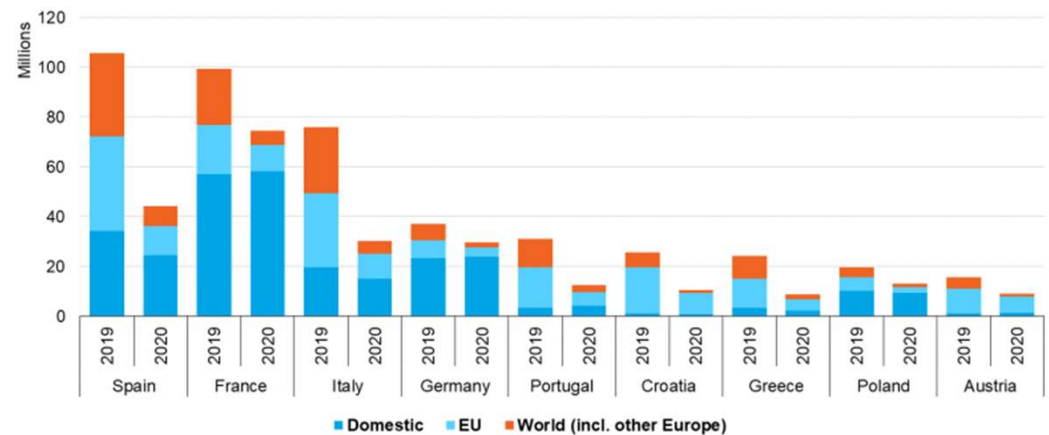


Data owing agreement with Airbnb, Booking, Expedia and TripAdvisor

Administrative boundaries © EuroGeographics © UN FAO © Turkuaz Cartography Eurostat – NACE 12/2021

Guest nights by origin of the guest, 2019 vs 2020

Nights spent in short-stay accommodation offered via online platforms



Source: Eurostat (Experimental statistics)

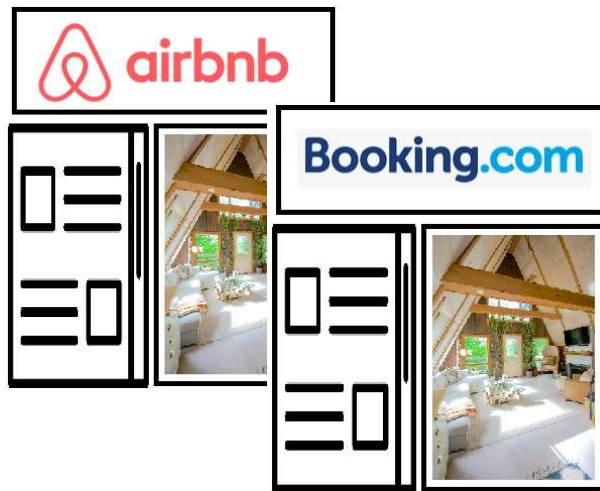
eurostat

Regions were affected differently – countries with larger share of domestic tourism came off best.

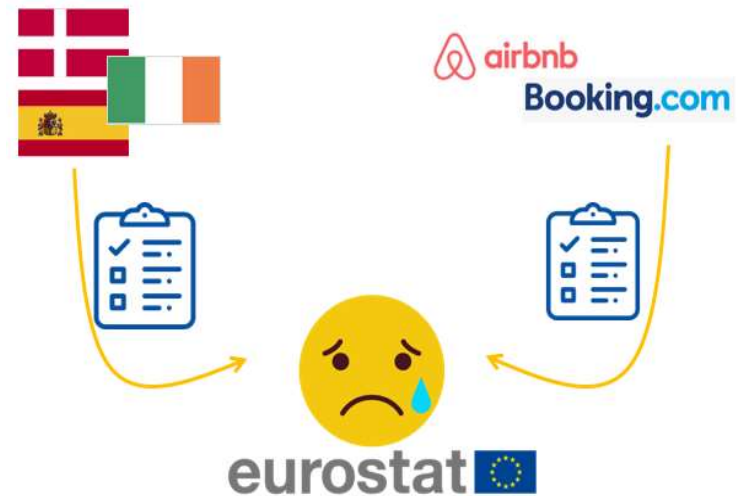
What's next? – Current limitations



- Double counting of listings
=> no capacity data



- Double counting of stays
=> limited integration with other data



Double counting of listings



- Hosts often advertise on multiple platforms to improve visibility
- Therefore, capacity data can not be simply summed up across platforms
- This is unfortunate, since capacity data is vital for policy makers and other users
- Eurostat has launched a platform (Web Intelligence Hub) to scrape sample data from the platforms
- Then: Match listings based on criteria such as listing text, images, locations
- Countries such as Finland and Spain have already experimented with this approach

Double counting of stays



- Listings promoted via platforms may also be included in surveys conducted by the Member States
- This means that bookings may be counted twice!
- Limited comparability to other tourism statistics; full integration and indicator design currently not possible
- Eurostat is aiming to develop a deduplication methodology together with interested NSIs
- NSIs receive granular data at LAU level from Eurostat and:
- They have access to granular micro-data and to the relevant registers that can contribute to such a method

Thank you

Data available at <https://ec.europa.eu/eurostat/web/experimental-statistics/collaborative-economy-platforms>

Stay in touch: Simon-Johannes.BLEY@ec.europa.eu



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